

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU.

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

| | |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Date of mailing (day/month/year) 27 June 2001 (27.06.01) | |
| International application No. PCT/GB00/04002 | Applicant's or agent's file reference |
| International filing date (day/month/year) 18 October 2000 (18.10.00) | Priority date (day/month/year) 18 October 1999 (18.10.99) |
| Applicant DUMINY, Jacques | |

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
 20 March 2001 (20.03.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

| | |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35 | Authorized officer Olivia TEFY Telephone No.: (41-22) 338.83.38 |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

To:

MATHISEN, MACARA & CO.
6-8 Swakeleys Road
Ickenham
Uxbridge UB10 8BZ
ROYAUME-UNI

| | |
|-----------------------------------------------------------------|--------------------------------------------------------------------------|
| Date of mailing (day/month/year) 11 December 2001 (11.12.01) | IMPORTANT NOTIFICATION |
| Applicant's or agent's file reference | |
| International application No. PCT/GB00/04002 | International filing date (day/month/year) 18 October 2000 (18.10.00) |

| | | |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1. The following indications appeared on record concerning: | | |
| <input checked="" type="checkbox"/> the applicant | <input type="checkbox"/> the inventor | <input type="checkbox"/> the agent <input type="checkbox"/> the common representative |
| Name and Address DRAFTEX INDUSTRIES LIMITED 7 Castle Street Edinburgh EH2 3AP United Kingdom | State of Nationality GB | State of Residence GB |
| | Telephone No. | |
| | Facsimile No. | |
| | Teleprinter No. | |
| 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: | | |
| <input type="checkbox"/> the person | <input checked="" type="checkbox"/> the name | <input type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence |
| Name and Address LAIRD HOLDINGS LIMITED 7 Castle Street Edinburgh EH2 3AP United Kingdom | State of Nationality GB | State of Residence GB |
| | Telephone No. | |
| | Facsimile No. | |
| | Teleprinter No. | |
| 3. Further observations, if necessary: | | |
| 4. A copy of this notification has been sent to: | | |
| <input checked="" type="checkbox"/> the receiving Office | <input type="checkbox"/> the designated Offices concerned | |
| <input type="checkbox"/> the International Searching Authority | <input checked="" type="checkbox"/> the elected Offices concerned | |
| <input checked="" type="checkbox"/> the International Preliminary Examining Authority | <input type="checkbox"/> other: | |

| | |
|-----------------------------------------------------------------------------------------------|-------------------------------------|
| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland | Authorized officer S. Buttay |
| Facsimile No.: (41-22) 740.14.35 | Telephone No.: (41-22) 338.83.38 |

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| | | |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Applicant's or agent's file reference | FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. | |
| International application No. PCT/GB 00/ 04002 | International filing date (day/month/year) 18/10/2000 | (Earliest) Priority Date (day/month/year) 18/10/1999 |
| Applicant DRAFTEX INDUSTRIES LIMITED | | |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

2
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

EP/GB 00/04002

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B60J10/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B60J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|------------------------------------------------------------------------------------|-----------------------|
| Y | US 4 676 995 A (FABRIS HUBERT J ET AL) 30 June 1987 (1987-06-30) | 1-4, 9, 10 |
| A | column 1, line 65-68; figures 1,3 --- | 5-8 |
| Y | EP 0 836 962 A (DRAFTEX IND LTD) 22 April 1998 (1998-04-22) | 1-4, 9, 10 |
| A | cited in the application claims 1,10; figures 1,3 --- | 5-8 |
| A | GB 2 070 675 A (PIRELLI) 9 September 1981 (1981-09-09) | 1, 2, 4, 9, 10 |
| A | claims 1-3; figures 1,2 --- | |
| A | DE 34 14 186 A (AUDI NSU AUTO UNION AG) 24 October 1985 (1985-10-24) | 1 |
| | figures 1-3 --- | |
| | --- -/-- | |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

11 January 2001

Date of mailing of the international search report

17/01/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Kusardy, R

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/04002

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|-------------------------------------------------------------------------------------------------------------|-----------------------|
| A | US 2 228 368 A (C.P. SCHLEGEL) 14 January 1941 (1941-01-14) figures 1-4 ----- | 1 |
| A | US 4 860 495 A (KESSLER GERALD) 29 August 1989 (1989-08-29) the whole document --- | 1 |
| A | DE 15 04 883 A (S.A. RUBBER MILLS PTY. LTD.) 25 September 1969 (1969-09-25) the whole document --- | 1 |
| A | GB 2 327 451 A (DRAFTEX IND LTD) 27 January 1999 (1999-01-27) figure 2 ----- | 5-8, 10 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

P/GB 00/04002

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|-------------------------------------------|---|---------------------|----------------------------|---------------------|
| US 4676995 | A | 30-06-1987 | EP 0240115 A | 07-10-1987 |
| | | | JP 2283444 A | 20-11-1990 |
| | | | JP 1616100 C | 30-08-1991 |
| | | | JP 2042850 B | 26-09-1990 |
| | | | JP 62223229 A | 01-10-1987 |
| | | | US 4789703 A | 06-12-1988 |
| EP 0836962 | A | 22-04-1998 | GB 2318379 A | 22-04-1998 |
| GB 2070675 | A | 09-09-1981 | IT 1140724 B | 01-10-1986 |
| | | | DE 3107321 A | 07-01-1982 |
| | | | FR 2477251 A | 04-09-1981 |
| | | | JP 56136335 A | 24-10-1981 |
| | | | SE 8100715 A | 30-08-1981 |
| DE 3414186 | A | 24-10-1985 | NONE | |
| US 2228368 | A | 14-01-1941 | NONE | |
| US 4860495 | A | 29-08-1989 | NONE | |
| DE 1504883 | A | 25-09-1969 | NONE | |
| GB 2327451 | A | 27-01-1999 | BR 9810986 A | 15-08-2000 |
| | | | CN 1264344 T | 23-08-2000 |
| | | | EP 0996552 A | 03-05-2000 |
| | | | WO 9903695 A | 28-01-1999 |

REPLACED BY
ART 34 AMDT

CLAIMS

1. A strip (6) of flexible thermoplastic elastomer material (22) having a first, thin closed-cell covering (24) thereover, the strip being characterised in that there is a second thin covering (26) on the outside of the first covering (24), the second covering (26) presenting an outwardly facing surface having a lower coefficient of friction than the first covering (24).
2. A strip (6) according to claim 1, in which the second covering (26) is made of plastic or rubber material.
3. A strip (6) according to claim 1 or 2, of hollow tubular form.
4. A strip (6) according to any preceding claim, attached to a longitudinally extending mounting part (10) for mounting the strip (6) adjacent a movable member to be compressed thereby to provide a sealing function.
5. A strip (6) according to claim 4, in which the mounting part (10) is also made of thermoplastic elastomer material (16) and the first covering (24) extends thereover.
6. A strip (6) according to claim 5, in which the second covering (26) extends over the first covering (24) on the mounting part (10).

7. A strip (6) according to any preceding claim, in which the thermoplastic elastomer material (22) and the two coverings (24, 26) are produced by extrusion.
8. A strip (6) according to claim 5 or 6, in which the thermoplastic elastomer material (22) of the strip (6) and of the mounting part (10) is co-extruded and in which at least the first covering (24) on the strip (6) and on the mounting part (10) is co-extruded.
9. A strip (6) according to any preceding claim, in which the thermoplastic elastomer material (22) is of cellular or foamed form.
10. A method of making a sealing strip (6), the method comprising the steps of extruding and foaming thermoplastic elastomer material (22), and extruding a first thin covering (24) of closed-cell material onto at least part of the outer surface of the thermoplastic elastomer material (22), characterised by the step of extruding a second, thin covering (26) onto at least part of the outside of the first covering (24), the second covering (26) presenting an outwardly facing surface having a lower coefficient of friction than the first covering (24).

PATENT COOPERATION TREATY

PCT

10/089965

REC'D 20 FEB 2002

WIPO PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

8

| | | |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Applicant's or agent's file reference --- | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/GB00/04002 | International filing date (day/month/year) 18/10/2000 | Priority date (day/month/year) 18/10/1999 |
| International Patent Classification (IPC) or national classification and IPC B60J10/00 | | |
| Applicant LAIRD HOLDINGS LIMITED et al. | | |


1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Date of submission of the demand 20/03/2001 | Date of completion of this report 18.02.2002 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized officer Durand-Smet, J Telephone No. +49 89 2399 8881 |



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/04002

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-6 as originally filed

Claims, No.:

1-9 as received on 11/01/2002 with letter of 10/01/2002

Drawings, sheets:

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/04002

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | |
|-------------------------------|-----------------|
| Novelty (N) | Yes: Claims 1-9 |
| | No: Claims |
| Inventive step (IS) | Yes: Claims 1-9 |
| | No: Claims |
| Industrial applicability (IA) | Yes: Claims 1-9 |
| | No: Claims |

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

Item V:

1. The invention relates to a strip of flexible thermoplastic elastomer material of open-cell foamed form having a first, thin closed-cell covering thereover. It further relates to a method of making a sealing strip, comprising the steps of extruding thermoplastic elastomer material in foamed open-cell form, and extruding a first thin covering of closed-cell material onto at least a part of the outer surface of the open-cell material. Such a strip and such a method are disclosed in **EP-A-0 836 962** and referred to in the precharacterising portions of claims 1 and 9.
2. As set out on page 5, first paragraph of the present PCT application, the covering or skin which is required in order to cover the opened cells of the thermoplastic elastomer material has been found to present a relatively high friction surface. If such a strip is a sealing strip extending along the edge of a vehicle door opening, the closing vehicle door will partially slide across the surface of the sealing strip at certain parts of it, e.g. adjacent the "A" pillar of the vehicle where it is hinged.
3. According to the invention, this problem is solved by having a second thin covering extending over at least part of the outside of the first covering, said second covering presenting an outwardly facing surface having a lower coefficient of friction than the first covering.
4. There is no suggestion to a skilled person among the other cited prior art documents to provide the sealing strip disclosed in **EP-A-0 836 962** with such a second low-friction covering: In this respect, although **US-A-4 676 995** shows the use of a low-friction skin, such a skin is not an second covering applied to a first covering over a foamed substrate, but is a covering applied directly to a foamed flexible thermoplastic material. Therefore, the subject-matters of claims 1 and 9 seem to be novel and inventive under the terms of article 33 (1) to (3) PCT.
5. Further developments in line with claim 1 are referred to in the dependent claims 2 to 8. Therefore, their subject-matters are also novel and inventive.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/04002

Item VII:

The description should be revised to ensure consistency with the new claims. It should further include an acknowledgement of **US-A-4 676 995** in addition to the present acknowledgement of **EP-A-0 836 962**, thus making clear why it would not have been readily available to a skilled person to combine the teachings of these two prior art documents, see **item V**, point **4.** above (Rule 5.1 (a) (ii) and (iii) PCT).

Jérôme DURAND-SMET



The
Patent
Office



INVESTOR IN PEOPLE

Draftex Industries Limited
% Mathisen, Macara & Co
The Coach House
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The Patent Office
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

Examiner: 01633 814800
†E-mail: dean.lacey@patent.gov.uk
Switchboard: 01633 814000
Fax: 01633 814444

Your Reference: 1/P32363GB
Application No: GB 9924605.0

1 March 2000

Dear Sirs

Patents Act 1977: Search Report under Section 17(5)

I enclose two copies of my search report and two copies of the citations.

Publication

I estimate that, provided you have met all formal requirements, preparations for publication of your application will be completed soon after **13 March 2001**. You will then receive a letter informing you of completion and telling you the publication number and date of publication.

Amendment/withdrawal

If you wish to file amended claims for inclusion with the published application, or to withdraw the application to prevent publication, you must do so before the preparations for publication are completed. **No reminder will be issued.** If you write to the Office less than 3 weeks before the above completion date, please mark your letter prominently: **"URGENT - PUBLICATION IMMINENT"**.

Yours faithfully

Dean Lacey
Examiner

†Use of E-mail: Please note that under patent law e-mail may be used to file correspondence only.



Application No: GB 9924605.0
Claims searched: 1 - 12

Examiner: Dean Lacey
Date of search: 29 February 2000

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.R): E1J: JGN, JM

Int CI (Ed.7): B60J: 10/00, 10/08

Other: Online: WPI, EPODOC, JAPIO

Documents considered to be relevant:

| Category | Identity of document and relevant passage | Relevant to claims |
|----------|--------------------------------------------|--------------------|
| A | GB 1044475 A (Draftex Limited) | |
| A | GB 0645558 A (Morris Motors Ltd) | |
| A | EP 0836962 A1 (Draftex Industries Limited) | |
| A | US 5690768 A (Toyoda Gosei Co. Ltd) | |

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined with one or more other documents of same category.
& Member of the same patent family

A Document indicating technological background and/or state of the art.
P Document published on or after the declared priority date but before the filing date of this invention.
E Patent document published on or after, but with priority date earlier than, the filing date of this application.